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STEIN, MCEWEN & BUI, LLP 1400 EYE STREET, NW SUITE 300 WASHINGTON, DC 20005			EXAMINER RUTLEDGE, AMELIA L	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/626,716

Applicant(s)

JUNG ET AL.

Examiner

Amelia Rutledge

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 6-13, 15-25, 52-54 and 57-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-13, 15-25, 52-54 and 57-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/20/2007; 04/28/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to communications: Amendment, filed 07/30/2007; Request for Continued Examination, filed 07/30/2007; Information Disclosure Statements, filed 06/20/2007 and 04/28/2006.
2. Claims 1-3, 6-13, 15-25 52-54, and 57-70 are pending. Claims 1, 52, and 67 are independent claims.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/30/2007 has been entered.

#### ***Information Disclosure Statement***

Applicant's Remarks, filed 07/30/2007, are directed to the IDS filed 06/20/2007, where reference AJ had previously not been considered because it was in Chinese. Applicant's Remarks, p. 20-21, explain the relevance of the reference AJ as described in the Chinese Office Action with English translation, and an updated copy of the IDS filed 06/20/2007 with all references considered is being mailed with this Office Action.

Art Unit: 2176

Applicant's representative stated that a copy of the IDS filed on 04/28/2006, which was considered by the examiner and mailed on 08/21/2006, was never received by applicant in the mail though it appears in the Image File Wrapper for the application (Remarks, p. 20). A copy of the IDS mailed on 08/21/2006 is being mailed with this Office Action as requested by applicant.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3, 6-13, 15-25 52-54, and 57-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamkin et al. (hereinafter "Lamkin"), U.S. Pub. No. 2002/0078144, published June 2002, filed August 21, 2001, in view of Montulli, U.S. Patent No. 6,134,592, issued October 2000.**

Regarding independent claim 1, Lamkin teaches an interactive digital content reproducing apparatus in the form of an embedded browser coupled to a DVD storage unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130). Compare to claim 1, *a data storage unit, the data storage unit comprising a non-volatile data storage portion; a retrieving unit to retrieve interactive digital content, the interactive digital content comprising: (AV) data; and a*

Art Unit: 2176

*markup document supporting an interactive function for reproducing the AV data and comprising a command program, the command program comprising a cookie generation command program.* Lamkin teaches a data storage unit, which can be part of the embedded browser according to the command program (p. 6, par. 107). This abstraction layer makes it possible to map the browser into a DVD player-specific DVD navigator. Lamkin teaches controlling the DVD data storage unit included in the apparatus with commands for transferring information and sharing system parameters for AV data reproduction (p. 7, par. 129-130). Lamkin teaches that the command program to control the data storage unit to reproduce the AV data is included in the markup document, because Lamkin teaches that the presentation engine of the embedded web browser parses the HTML instructions for controlling the media playback (p. 6, par. 107), and the presentation engine of the browser provides for the embedding of video within web pages (p. 6, par. 106-107). Therefore Lamkin teaches that the HTML instructions are the command program for controlling the media playback, and are included in the markup document, the HTML page.

Specifically, Lamkin teaches the playback of audio and/or video embedded within a web page (p. 4, par. 74) which contains a command program (p. 4, par. 84) to generate cookies (p. 11, par. 205-p. 12, par. 218). Lamkin teaches parsing the markup document and extracting the command programs by interpreting the markup structure, (p. 5, par. 86; p. 6, par. 107), which are included in the markup document. Compare to claim 1, *a presentation engine comprising: a parser to receive the interactive digital content from the retrieving unit; and verify a syntax of the markup document of the*

*interactive digital content ; a document object model (DOM) tree forming unit to:  
receive the markup document from the parser; and extract the command program the  
markup document by interpreting a structure of the markup document.*

Specifically, Lamkin teaches that the presentation engine comprises a parser for verifying a syntax of the markup document, a document object model (DOM) tree forming unit for receiving the markup document from the parser, for interpreting a structure of the markup document, and for extracting the command program included in the markup document, since Lamkin teaches an application programming interface (API) providing a common programming interface for HTML and ECMAScript, a standardized script based on JavaScript, thus facilitating the playback of AV data within a web page (p. 4, par. 73 and 74). Therefore the DOM tree forming unit is implied in the teachings of Lamkin since Lamkin teaches the use of the API reading HTML for interpreting a structure of the markup document and extracting the command program in the form of a standardized script, and a DOM tree forming unit would have been required to read the HTML and interpret the structure of the web page. Also compare to claim 1, *an interpreter to receive the command program from the DOM tree forming unit wherein the interpreter executes the cookie generation command program of the command program to generate a cookie comprising: cookie data to be used by the interactive digital content reproducing apparatus in a subsequent interactive digital content reproducing operation performed in the interactive digital content reproducing apparatus.*

Lamkin teaches a cookie manager, i.e., a decoder decoding a read content, and a command program which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135; p. 12, par. 207-214), and commands the generated cookie information be stored in the data storage unit (p. 11, par. 205-206), compare to *store the cookie in the non-volatile data storage portion of the data storage unit*.

While Lamkin teaches the use of a plurality of cookies containing data to be used by the AV content reproducing apparatus (p. 12, par. 207-225), Lamkin does not explicitly teach that the cookie data contains *a domain attribute identifying the interactive digital content reproducing apparatus as a domain*; however Lamkin's teaching of the use of a cookie to contain a hardware identifier of a device (p. 12, par. 209, 213) strongly suggests the limitation but does not teach storing the apparatus, i.e., hardware, identifying information as a domain attribute. However, Montulli teaches a method for transferring state information between a server and client computer using cookies (col. 7, l. 16-60). Montulli teaches that the cookie domain attribute can be set by the server system in order to retain state information, and that a domain name may define a subset of a domain, and may be set to any host name, such as "anvil.acme.com" and "shipping-crate.acme.com", which each fall within the "acme.com" domain (col. 8, l. 5-58; col. 5, l. 15-36). Montulli teaches that state information is tracked by matching the "name" "domain" and "path" attributes when a cookie is received (col. 9, . 37-col. 11, l. 46) and overwriting or changing the state information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claim 2**, Lamkin wherein the retrieving unit comprises a reading unit to read the interactive digital content from the storage medium, since Lamkin teaches controlling a data storage unit, which can be part of the embedded browser according to the command program (p. 6, par. 107).

**Regarding dependent claim 3**, Lamkin teaches that the command program is written in ECMAScript which is a standardized script based on JavaScript (p. 4, par. 73).

**Regarding dependent claim 6**, Lamkin teaches incorporating content identification information into the cookie information, generated by fetching predetermined target information from an AV decoder, the id field from the disk title (p. 11, par. 205-206; p. 12, par. 213).

**Regarding dependent claim 7**, Lamkin implies that the command program of the markup document further comprises a cookie reference command program; and wherein the interpreter executes the cookie reference command program of the



Art Unit: 2176

command program to: search the data storage unit for a cookie having a desired content identification information; and extract cookie data from any cookie having the desired content identification information that is found in the search, because Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies; Lamkin does not explicitly teach searching for desired content identification information. However, Montulli teaches matching and extracting desired content identification information (col. 9, l. 37-col. 10, l. 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claim 8,** Lamkin teaches wherein the cookie data comprises a state of a system variable of the interactive digital content reproducing apparatus obtained from the decoder by the interpreter under control of the cookie generation command program commands, because Lamkin teaches a cookie manager, i.e., a decoder decoding a read content, and a command program which operates to control the data storage unit by extracting predetermined target information (p. 7, par.

132-135; p. 12, par. 207-214), and commands the generated cookie information be stored in the data storage unit (p. 11, par. 205-206).

**Regarding dependent claim 9**, Lamkin teaches that cookie information is sent from the web page to the server (p. 11, par. 204-206), therefore Lamkin discloses that the cookie data comprises data obtained from the markup document by the interpreter under control of the cookie generation command program.

**Regarding dependent claim 10**, Lamkin teaches that the cookie data comprises data input by a user of the interactive digital content reproducing apparatus, because Lamkin teaches the use of system cookies which are automatically created and modified by the player hardware and embedded browser (p. 12, par. 207), and Lamkin discloses that the system cookies are created in response to events on the web page created by the user in association with controlling the data storage unit, since the cookies are created in response to the events of the user accessing an internet website (p. 7, par. 129).

**Regarding dependent claim 11**, Lamkin teaches that the command program of the markup document further comprises a cookie reference command program, and wherein the interpreter executes the cookie reference command program of the command program to: search the data storage unit for a desired cookie; and extract cookie data from the desired cookie if the desired cookie is found in the search. Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies and extract data. Montulli teaches matching

and extracting desired content identification information from cookies(col. 9, l. 37-col. 10, l. 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claim 12**, Lamkin teaches a cookie manager which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135). Lamkin teaches generating and modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). Lamkin implies that the cookie manager searches for matching cookie information items and allows deletion of cookie information since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies. Montulli explicitly teaches deleting cookies (col. 9, l. 37-col. 10, l. 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web

page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claims 13-21**, Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135).

Lamkin implies that the cookie manager searches for matching cookie information items and allows deletion of cookie information since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies. Montulli explicitly teaches deleting cookies (col. 9, l. 37-col. 10, l. 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the

reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claim 22**, while Lamkin does not explicitly teach the cookie information further comprises an expires attribute defining a duration of the cookie information, Montulli teaches an expires attribute (col. 9, l. 37-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claim 23**, Lamkin teaches modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). While Lamkin does not explicitly teach the overwriting method, Montulli teaches wherein in storing the cookie, the interpreter overwrites, with the cookie being stored, any cookie stored in the non-volatile data storage portion of the data storage unit that has a same domain attribute as the cookie being stored, a same path attribute as the cookie being stored, and the same name of the cookie data as the cookie being stored, information generated according to the cookie generation command program exists in the data storage unit, the presentation engine overwrites

Art Unit: 2176

the cookie information in the data storage unit with the generated cookie information, because Montulli teaches that state information is tracked by matching the "name" "domain" and "path" attributes when a cookie is received (col. 9, . 37-col. 11, l. 46) and overwriting or changing the state information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claim 24**, Lamkin teaches that the cookie further comprises content identification identifying the interactive digital content retrieved by the retrieving unit; wherein according the interpreter searches the data storage unit for the desired cookie by searching the data storage unit for a cookie having a desired content identification information; and wherein the interpreter extracts the cookie data from the desired cookie by extracting cookie data from any cookie information having the desired content identification that is found in the search, for example, Lamkin teaches a Player Mode cookie and a bookmark cookie to identify particular content (p. 12, par. 0212-0225).

**Regarding dependent claim 25**, Lamkin teaches modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). While Lamkin does not explicitly teach the method of matching name and value, Montulli teaches wherein in storing the cookie, the interpreter overwrites, with the cookie being stored, any cookie stored in the non-volatile data storage portion of the data storage unit that has a same domain attribute as the cookie being stored, a same path attribute as the cookie being stored, and the same name of the cookie data as the cookie being stored, information generated according to the cookie generation command program exists in the data storage unit, the presentation engine overwrites the cookie information in the data storage unit with the generated cookie information, because Montulli teaches that state information is tracked by matching the "name" "domain" and "path" attributes when a cookie is received (col. 9, . 37-col. 11, l. 46).

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding independent claim 52**, Lamkin teaches an interactive digital content reproducing apparatus in the form of an embedded browser coupled to a DVD storage

Art Unit: 2176

unit, which reproduces interactive digital content from a storage medium, which comprises AV data and a markup document used for AV reproduction (p. 6 par. 108-p. 7, par. 130, especially par. 129-130). Compare to claim 52, *an information storage medium comprising interactive digital content for use-reproduction in an interactive digital content reproducing apparatus, the interactive digital content reproducing apparatus comprising a data storage unit, the data storage unit comprising a non-volatile data storage portion*. Lamkin teaches a data storage unit, which can be part of the embedded browser according to the command program (p. 6, par. 107). This abstraction layer makes it possible to map the browser into a DVD player-specific DVD navigator. Lamkin teaches controlling the DVD data storage unit included in the apparatus with commands for transferring information and sharing system parameters for AV data reproduction (p. 7, par. 129-130). Lamkin teaches that the command program to control the data storage unit to reproduce the AV data is included in the markup document, because Lamkin teaches that the presentation engine of the embedded web browser parses the HTML instructions for controlling the media playback (p. 6, par. 107), and the presentation engine of the browser provides for the embedding of video within web pages (p. 6, par. 106-107). Therefore Lamkin teaches that the HTML instructions are the command program for controlling the media playback, and are included in the markup document, the HTML page.

Specifically, Lamkin teaches the playback of audio and/or video embedded within a web page (p. 4, par. 74) which contains a command program (p. 4, par. 84) to generate cookies (p. 11, par. 205-p. 12, par. 218). Lamkin teaches parsing the markup



Art Unit: 2176

document and extracting the command programs by interpreting the markup structure, (p. 5, par. 86; p. 6, par. 107), which are included in the markup document. Compare to claim 52, *wherein the interactive digital content of the information storage medium comprises: audio/video (AV) data; and a markup document which reproduces supporting an interactive function for reproducing the AV data and comprising a cookie generation command program.* Lamkin teaches a cookie manager, i.e., a decoder decoding a read content, and a command program which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135; p. 12, par. 207-214), and commands the generated cookie information be stored in the data storage unit (p. 11, par. 205-206), compare to *wherein the cookie generation command program controls the interactive digital content reproducing apparatus to generate a cookie comprising: cookie data to be used by the interactive digital content reproducing apparatus in a subsequent interactive digital content reproducing operation performed in the interactive digital content reproducing apparatus;... and store the cookie in the non-volatile data storage portion of the data storage unit.*

While Lamkin teaches the use of a plurality of cookies containing data to be used by the AV content reproducing apparatus (p. 12, par. 207-225), Lamkin does not explicitly teach that the cookie data contains a *domain attribute identifying the interactive digital content reproducing apparatus as a domain*; however Lamkin's teaching of the use of a cookie to contain a hardware identifier of a device (p. 12, par. 209, 213) strongly suggests the limitation but does not teach storing the apparatus, i.e., hardware, identifying information as a domain attribute. However, Montulli teaches a

Art Unit: 2176

method for transferring state information between a server and client computer using cookies (col. 7, l. 16-60). Montulli teaches that the cookie domain attribute can be set by the server system in order to retain state information, and that a domain name may define a subset of a domain, and may be set to any host name, such as "anvil.acme.com" and "shipping-crate.acme.com", which each fall within the "acme.com" domain (col. 8, l. 5-58; col. 5, l. 15-36). Montulli teaches that state information is tracked by matching the "name" "domain" and "path" attributes when a cookie is received (col. 9, . 37-col. 11, l. 46) and overwriting or changing the state information.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding dependent claims 53 and 54**, claims 53 and 54 reflect substantially similar subject matter as claimed in claims 6 and 3, respectively, and are rejected along the same rationale.

**Regarding dependent claim 57**, Lamkin teaches wherein the markup document comprises content identification information identifying the interactive digital content of

the information storage medium; and wherein the cookie generation command program controls the interactive digital content reproducing apparatus to: obtain the content identification information from the markup document; and include the content identification information in the cookie, since Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212).

**Regarding dependent claim 58**, Lamkin teaches wherein the interactive digital content reproducing apparatus further comprises a decoder to decode the AV data; and wherein the cookie generation command program controls the interactive digital content reproducing apparatus to: obtain a state of a system variable of the interactive digital content reproducing apparatus from the decoder; and include the state of the system variable in the cookie data. Lamkin discloses a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135). Lamkin teaches that the cookie information is modifiable (p. 12, par. 207).

**Regarding dependent claim 59**, Lamkin teaches wherein the cookie generation command program controls the interactive digital content reproducing apparatus to: obtain data from the markup document; and include the data obtained from the markup document in the cookie data information, since Lamkin teaches a system cookie which

Art Unit: 2176

contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212).

**Regarding dependent claims 60-64**, claims 60-64 are directed to substantially similar subject matter as claimed in claims 10, and 11-13, respectively, and are rejected along the same rationale.

**Regarding dependent claims 65 and 66**, Lamkin teaches a cookie manager which operates to control the data storage unit by extracting predetermined target information (p. 7, par. 132-135). Lamkin teaches generating and modifying items of cookie information (p. 12, par. 207) and overwriting, i.e., deleting, the cookie information items (p. 12, par. 223). It is suggested in the disclosure of Lamkin that the cookie manager searches for matching cookie information items and allows deletion of cookie information since Lamkin teaches that the API is implemented in the JavaScript scripting language, which contains standard program commands to search for matching cookie information items and to delete cookies; compare to cookie reference command program of claim 19. Lamkin teaches a system cookie which contains a name and value for the player state and a path of a markup document using the player, since it is a system cookie automatically created and modified by the player hardware and the embedded browser (p. 11, p. 205-206; p. 12, par. 207; 212). Lamkin teaches name value pairs containing name and value of target information, as in the player mode and the current value of the mode information (p. 7, p. 132-135).

Montulli teaches that the cookie domain attribute can be set by the server system in order to retain state information, and that a domain name may define a subset of a domain, and may be set to any host name, such as "anvil.acme.com" and "shipping-crate.acme.com", which each fall within the "acme.com" domain (col. 8, l. 5-58; col. 5, l. 15-36). Montulli teaches that state information is tracked by matching the "name" "domain" and "path" attributes when a cookie is received (col. 9, . 37-col. 11, l. 46) and overwriting or changing the state information. Thus while Lamkin does not explicitly teach the specific method of cookie deletion, Montulli teaches matching the cookie path data for deletion, and for extraction and overwriting, compare to claims 65 and 66.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to apply the method of setting the domain attribute to track state information disclosed by Montulli to the method of playing back DVD and web content on a web page disclosed by Lamkin, because Lamkin teaches methods of using cookies to track content playback information, and Montulli teaches a method of setting cookie attributes to track state information; it would have been both obvious and desirable to identify the reproducing apparatus as a domain, since Montulli teaches a method of using the domain attribute to track general categories of state dependent information.

**Regarding independent claim 67**, claim 67 is directed toward the computer-readable medium having embodied thereon a program to be implemented as the apparatus as claimed in claim 1, and is directed to substantially similar subject matter, and is rejected along the same rationale.

**Regarding dependent claim 68**, Lamkin teaches wherein the retrieving unit comprises a network access unit to receive the interactive digital content through a network (p. 2, par. 0036-0038).

**Regarding dependent claim 69**, Lamkin teaches wherein the system variable is a play state system variable of the interactive digital content reproducing apparatus (p. 7, par. 0129-0131; p. 14-33).

**Regarding dependent claim 70**, Lamkin teaches wherein the system variable is a parental level system variable of the interactive digital content reproducing apparatus (p. 67, C.1.10; p. 42; A.2.13).

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 6-13, 15-25 52-54, and 57-70 have been considered but are moot in view of the new ground(s) of rejection. The new ground of rejection includes the Montulli patent, which is being relied upon to teach the newly claimed limitation:

*...to generate a cookie comprising: cookie data to be used by the interactive digital content reproducing apparatus in a subsequent interactive digital content reproducing operation performed in the interactive digital content reproducing apparatus; and a domain attribute identifying the interactive digital content reproducing apparatus as a domain; (Claims 1, 1, 52, and 67).*

**Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gewickey et al. US Pub. No. 2003/0028892 A1 published February 2003

Evans et al. U.S. Patent No. 6,990,671 B1 issued January 2006

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amelia Rutledge whose telephone number is 571-272-7508. The examiner can normally be reached on Monday - Friday 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AR

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